

[0011] One example of a polysaccharide that can be ionically cross-linked is **alginate**. **Alginate** can be ionically cross-linked to itself with metal cations, including Mg<sup>2+</sup>; Ni<sup>2+</sup>; Ca<sup>2+</sup>; Sr<sup>2+</sup>; Ba<sup>2+</sup>; Zn<sup>2+</sup>; Cd<sup>2+</sup>; Cu<sup>2+</sup>; Pb<sup>2+</sup>; Fe<sup>3+</sup>; and Al<sup>3+</sup>. In some embodiments, the cation is Ca<sup>2+</sup>. A second polysaccharide, such as dextran, can also be physically trapped, e.g., by the network formed by the ionic cross-linking of the first polysaccharide. Dextran can be in the form of cross-linked beads, e.g., dextran that has been previously cross-linked to itself. Dextran can be covalently linked to the bandage, e.g. by linking dextran to the cellulose with epichlorohydrin.